

t20_topdim_1
(TMS4PH4V3wyiXrNwxA78iQ5hqCsR2Wkd75C)

October 27, 2020

Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $v3_topdim_1 : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_topdim_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_topdim_1 : \iota \Rightarrow \iota$ be given. Let $k1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_topdim_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v2_pre_topc X0) \wedge ((v3_topdim_1 X0) \wedge (l1_pre_topc \\ X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ X0))) \Rightarrow ((v3_topdim_1 (k1_pre_topc X0 X1)) \wedge (r1_xxreal_0 (k4_topdim_1 \\ (k1_pre_topc X0 X1)) (k4_topdim_1 X0)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ ((v1_topdim_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ X0)))) \Rightarrow ((v3_topdim_1 (k1_pre_topc X0 X1)) \wedge (k4_topdim_1 (k1_pre_topc \\ X0 X1) = k2_topdim_1 X0 X1))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0.((v2_pre_topc X0) \wedge ((v3_topdim_1 X0) \wedge (l1_pre_topc \\ X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ X0))) \Rightarrow (v1_topdim_1 X1 X0)) \end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned} \forall X0.((v2_pre_topc X0) \wedge ((v3_topdim_1 X0) \wedge (l1_pre_topc \\ X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ X0))) \Rightarrow (r1_xxreal_0 (k2_topdim_1 X0 X1) (k4_topdim_1 X0))) \end{aligned}$$